

# PERMIT REQUIRED CONFINED SPACE ENTRY

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# PURPOSE OF PROGRAM

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- TO IDENTIFY & EXPOSE INHERENT DANGER OF CONFINED SPACES
- PROVIDE STRICT GUIDELINES TO PERSONNEL OPERATING IN A POTENTIALLY HAZARDOUS ENVIRONMENT
- GREATLY REDUCE THE RISK OF POTENTIAL INJURY AND/OR DEATH

# WHAT IS A CONFINED SPACE?

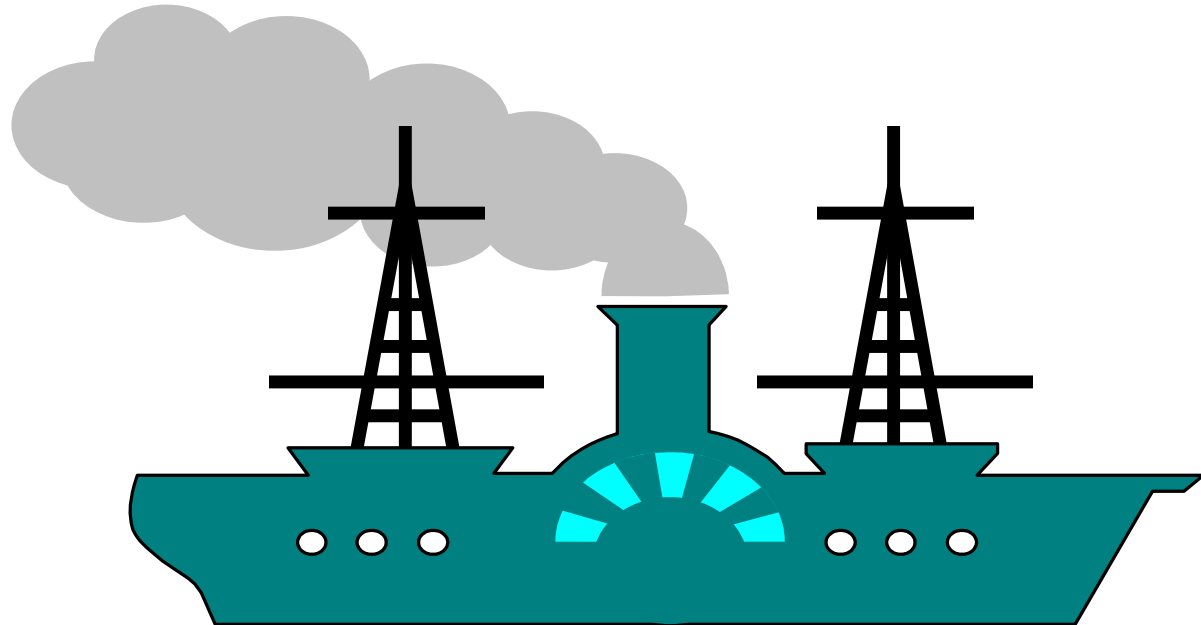
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ENCLOSURES THAT ARE :

- NOT DESIGNED FOR ROUTINE OCCUPANCY BUT LARGE ENOUGH AND SO CONFIGURED THAT PERSONNEL CAN ENTER TO PERFORM A JOB-RELATED TASKING

# WHAT IS A CONFINED SPACE (CONT)

- INCLUDING BREATHING ZONE ENTRY
- POOR OR NO VENTILATION
- RESTRICTED ACCESS/EXIT

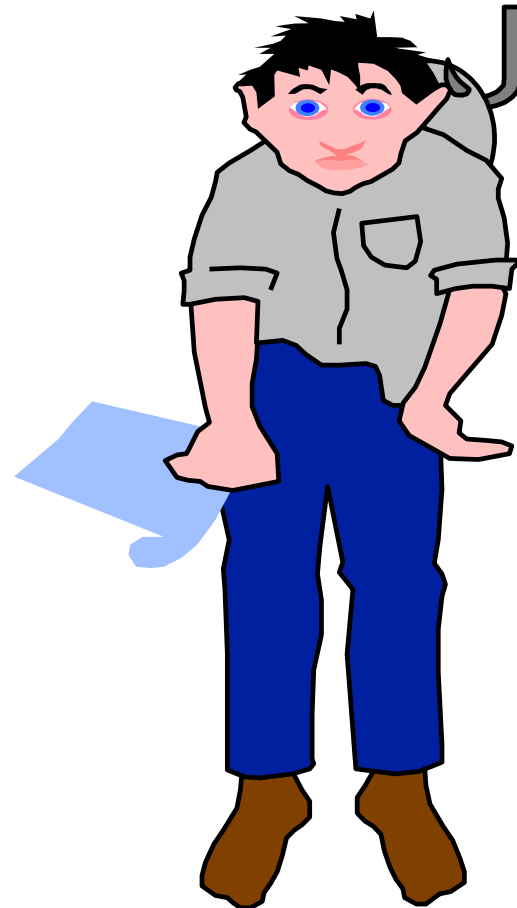


# HAZARDS ASSOCIATED WITH A CONFINED SPACE

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LACK OF SUFFICIENT  
OXYGEN TO SUPPORT  
LIFE  $< 20\%$

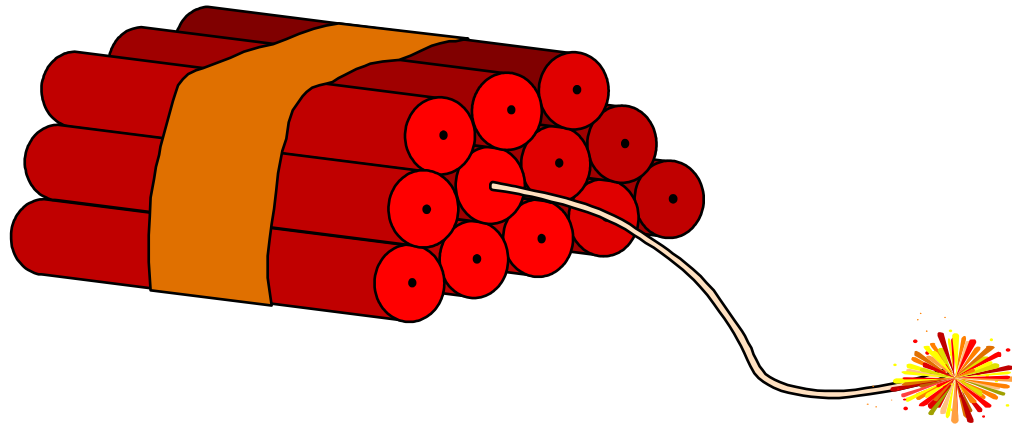
OXYGEN ENRICHED  
ENVIRONMENT WHICH  
CREATES THE  
POTENTIAL FOR FIRE  
OR EXPLOSION  $> 22\%$



# HAZARDS ASSOCIATED WITH A CONFINED SPACE (CONT)

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PRESENCE OF TOXIC  
OR EXPLOSIVE ATMOSPHERES



# HAZARDS ASSOCIATED WITH A CONFINED SPACE (CONT)

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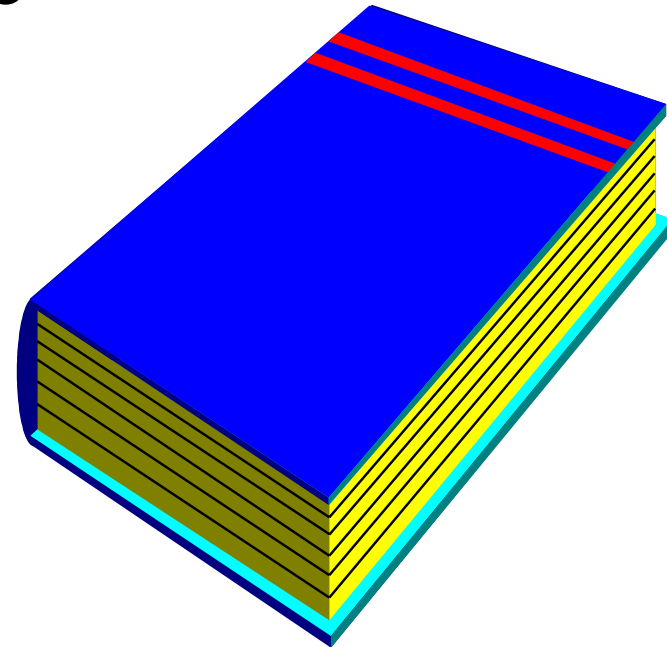
## PHYSICAL HAZARDS:

MACHINERY, ELECTRICAL, CABLES  
OBSTRUCTIONS, POOR ILLUMINATION,  
ENGULFMENT, SLIPPERY SURFACES

# STANDARDS

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- 29 CFR 1910.146
- NAVSEA S6470-AA-SAF-010
- NAVAIR 01-1A-35  
(Aviation Gas Free  
Engineering)
- MCO 5100.8F, Chapter 14



# COMMANDING OFFICER'S RESPONSIBILITIES

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- ESTABLISH PROGRAM
- CONDUCT PROGRAM BY ASSIGNMENT IN WRITING OF CONFINED SPACE ENTRY/GAS FREE ENGINEERS (CSE/GFE), ASSISTANTS AND TECHNICIANS

# COMMANDING OFFICER'S RESPONSIBILITIES (CONT)

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- EVALUATE THE CONFINED SPACE ENTRY/GAS FREE ENGINEER PROGRAM (CSE/GFEP)

# SUPERVISOR'S RESPONSIBILITIES

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CONTACT A STATION  
CSE/GFE BEFORE  
CONDUCTING ANY  
OPERATIONS  
INVOLVING  
CONFINED/RESTRICTED  
SPACE ENTRY



# SUPERVISOR'S RESPONSIBILITIES (CONT)

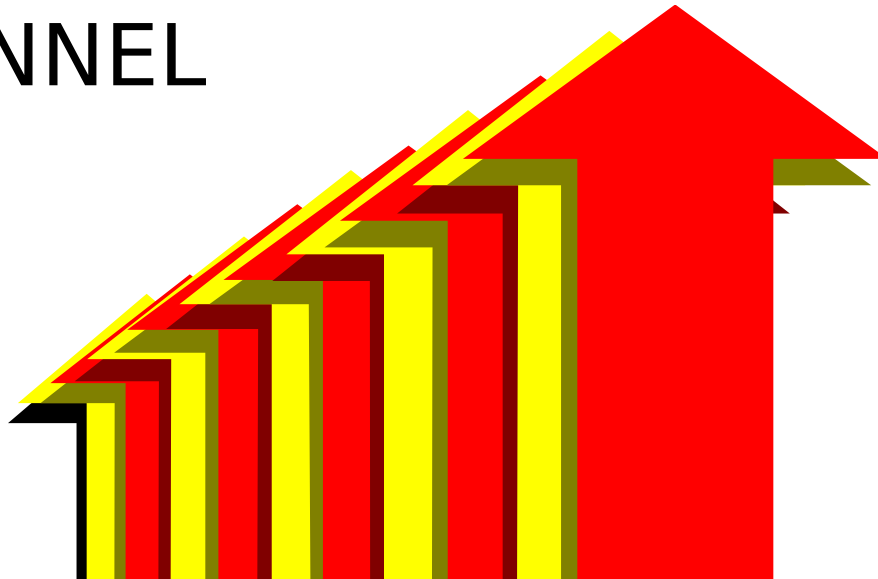
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CONTACT A STATION CSE/GFE AND  
STATION FIRE PREV/DEPT PRIOR TO  
OPERATIONS THAT INVOLVE HOT  
WORK IN, ON OR ADJACENT TO  
CONFINED OR RESTRICTED SPACES  
**HOT WORK DEFINED AS ANYTHING  
HEAT PRODUCING OPERATION THAT  
EXCEEDS 450 deg. F**

# SUPERVISOR'S RESPONSIBILITIES (CONT)

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ENSURE THAT SAFETY PRECAUTIONS  
COVERED IN THIS CLASS  
INSTRUCTION ARE COMPLIED WITH  
AS APPLICABLE BY ALL ASSIGNED  
PERSONNEL



# SUPERVISOR'S RESPONSIBILITIES (CONT)

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- ENSURE PERSONNEL ARE INSTRUCTED ON PRECAUTION OF EACH SPACE PRIOR TO ENTRANCE
- ENSURE ALL PERSONNEL TO ENTER HAVE HAD TRAINING
- REQUEST ASSISTANCE/TRAINING FROM THE STATION CSE/GFE AS REQUIRED

**DOCUMENT ALL TRAINING!**

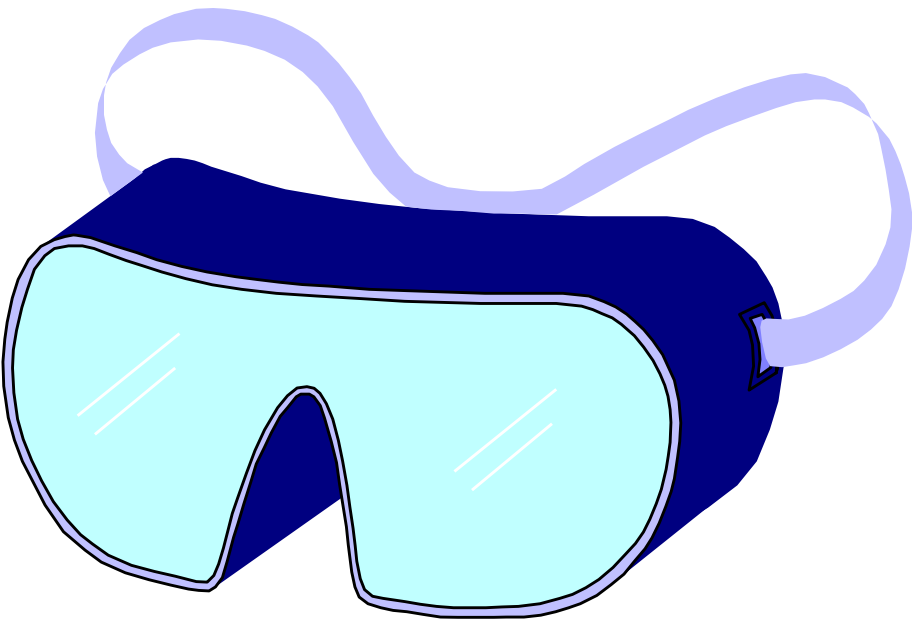
# SUPERVISOR'S RESPONSIBILITIES (CONT)

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- IDENTIFICATION OF HAZARDS TO PERSONNEL
- COMPLY WITH APPROPRIATE SAFETY MEASURES

# SUPERVISOR'S RESPONSIBILITIES (CONT)

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ENSURE PERSONNEL  
ARE MEDICALLY FIT

ENSURE PERSONNEL  
ARE TRAINED IN  
REQUIRED PERSONAL  
PROTECTIVE  
EQUIPMENT AND  
CLOTHING

# BASIC ELEMENTS OF PROGRAM

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THE CONFINED SPACE PROGRAM  
MANAGER/GAS FREE ENGINEER  
(CSPM/GFE) SHALL:

- \* IDENTIFY ALL CONFINED SPACES AND  
CLASSIFY AS CLASS I, II OR III

# BASIC ELEMENTS OF PROGRAM (CONT)

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- \* EVALUATE HAZARDS FOR PERSONNEL
- \* REGULATE AND CONTROL ACCESS VIA PERMITS

# CLASS I SPACE

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SPACES THAT CONTAIN  
ATMOSPHERES OR CONDITIONS  
THAT ARE IMMEDIATELY  
DANGEROUS TO LIFE OR HEALTH  
(IDLH)

# IDLH SPACE

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- FLAMMABLE GASES OR VAPORS AT A CONCENTRATION OF 10% OR GREATER OF THE LOWER EXPLOSIVE LIMIT
- OXYGEN  $< 16.5\%$  OR  $> 22.0\%$

# IDLH SPACE (CONT)

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- PRESENCE OF TOXIC AGENTS WHICH EXCEED THE LEVEL AT WHICH AN INDIVIDUAL CAN ESCAPE WITHIN 30 MINUTES
- ANY COMBINATION OF THE ABOVE

# CLASS II SPACE

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- SPACES THAT CONTAIN ATMOSPHERES OR CONDITIONS WHICH ARE DANGEROUS BUT NOT LIFE-THREATENING
- FLAMMABLE ATMOSPHERES  $>1\%$  BUT  $< 10\%$  LEL

# CLASS II SPACE (CONT)

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- OXYGEN  $> 16.5\%$  BUT  $< 19.5\%$
- TOXIC AGENTS THAT ARE NOT IDLH BUT AT OR ABOVE THE PERMISSIBLE EXPOSURE LIMITS
- ANY COMBINATION OF THE ABOVE

# CLASS III SPACE

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- SPACES THAT CONTAIN ATMOSPHERES OR CONDITIONS THAT ARE CONTAMINATED BUT NOT DANGEROUS OR IDLH
- FLAMMABLES OR FLAMMABLE ATMOSPHERES  $< 1\%$  OF LEL

# CLASS III SPACE (CONT)

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- OXYGEN CONSISTENT WITH OUTSIDE AMBIENT CONDITIONS (20-21%)
- TOXIC AGENTS BELOW PERMISSIBLE EXPOSURE LIMITS
- ANY COMBINATION OF THE ABOVE

# CSE REQUIREMENTS FOR PERSONNEL

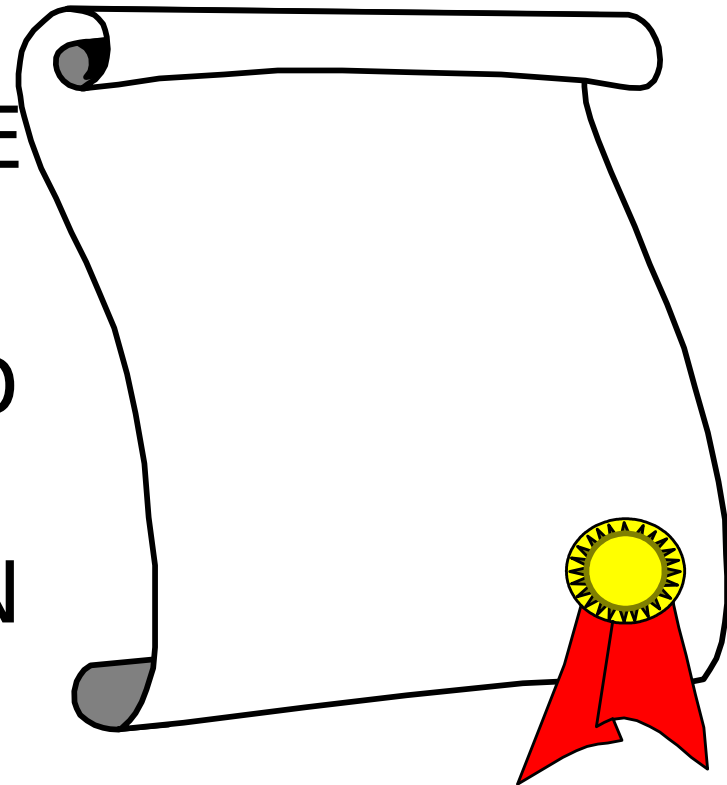
- TRAINING FROM SUPERVISOR
- PRE-PLACEMENT EXAMINATION
- TERMINATION EXAMINATION



# DISTRIBUTION OF PERMIT

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- ONE COPY TO BE POSTED AT THE PRIMARY ENTRANCE TO THE SPACE
- ONE COPY TO BE POSTED AT ALL OTHER ENTRY POINTS WHICH ARE OPEN AND ACCESSIBLE TO PERSONNEL



# DISTRIBUTION OF PERMIT (CONT)

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- ONE COPY TO THE LINE MANAGER REQUESTING THE PERMIT
- ONE COPY RETAINED BY THE CSPM/GFE FOR ONE YEAR FROM THE PERMIT DATE.

THIS INCLUDES REJECT  
PERMITS

# TRAINING REQUIREMENTS

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- THE CSPM/GFE SHALL SUCCESSFULLY COMPLETE OSHA COURSE 226 OR NAVOSHENVTRAINCEN COURSE #S0-240, CONFINED SPACE SAFETY (FORMERLY OSH-245E) OR ITS EQUIVALENT

# TRAINING REQUIREMENTS (CONT)

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- QUALIFIED ASSISTANTS AND TECHNICIANS SHALL BE TRAINED AND RECOMMENDED FOR CERTIFICATION BY THE CSPM/GFE
- CERTIFICATION CAN ONLY BE OBTAINED BY THE COMMANDING OFFICER OF THE ACTIVITY YOU ARE ASSIGNED TO

# TRAINING REQUIREMENTS (CONT)

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- SUPERVISORS SHALL HAVE SUCCESSFULLY COMPLETED THIS COURSE
- NON-SUPERVIORY PERSONNEL TO BE TRAINED BY SUPERVISORS AS OUTLINED IN THIS CLASS

# ENTRY INTO CLASS I OR CLASS II SPACE

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- CSE/GFE PERMIT REQUIRED TO BE POSTED
- ATTENDANTS MANDATORY

# ENTRY INTO CLASS I OR CLASS II SPACE (CONT)

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**NOTE: ENTRY INTO CLASS I  
SPACE FOR EMERGENCIES ONLY**

**NOTE: ENTRY INTO CLASS II  
SPACE FOR EMERGENCY  
MAINTENANCE ONLY**

# FUNCTION OF ATTENDANTS

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- MONITOR CONDITIONS OF PERSONNEL INSIDE BY VISUAL AND/OR VERBAL CONTACT
- CPR CERTIFIED (MUST BE CURRENT AND HOLD CARD)

# FUNCTION OF ATTENDANTS (CONT)

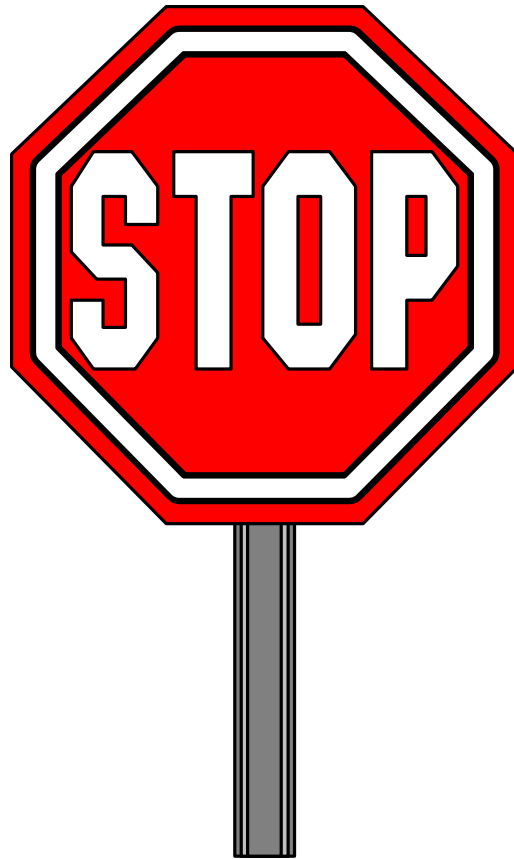
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- **SHALL HAVE NO ADDITIONAL DUTIES ASSIGNED**

**NO ATTEMPT WILL BE MADE TO  
RESCUE PERSONNEL UNTIL  
AFTER RESCUE TEAM  
ARRIVES!!!**

# CONFINED SPACE EMERGENCIES

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# CONFINED SPACE EMERGENCIES (CONT)

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DO NOT ENTER THE SPACE TO SAVE  
THE VICTIM!!

REMOVE/HOIST PERSONNEL BY  
LIFELINE WHEN AVAILABLE

CALL EMERGENCY RESCUE  
IMMEDIATELY

# CONFINED SPACE EMERGENCIES (CONT)

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STATE THAT A CONFINED SPACE  
EMERGENCY HAS OCCURRED

GIVE SPECIFIC LOCATION AND ANY  
OTHER PERTINENT INFORMATION

REQUEST EMERGENCY RESPONSE  
TEAM

# CONFINED SPACE SELF TEACHING REQUIREMENTS

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- IN ORDER TO  
TEACH THIS  
CLASS AT YOUR  
COMMAND YOU  
MUST:

1) BE A SUPERVISOR  
AND/OR TECHNICIAN

AND

2) HAVE ATTENDED  
THIS CLASS